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GTE Service Corporation
1850 M Street, N.W., Suite 1200
Washington, DC 20036
202 463-5200

April 20, 1999

Mr. Dale Hatfield
Chief, Office of Engineering and Technology
Federal Communications Commission
2000 M Street, N.W., Suite 480
Washington, DC 20554

RE: GTE Final Service Disruption Report for March 22, 1999 Event

Dear Mr. Hatfield,

In accordance with the outage reporting thresholds established in CC Docket 91-273, we are enclosing GTE's Final Service Disruption Report for the above-referenced event. GTE previously filed an Initial Service Disruption Report with the Commission on March 22, 1999.

If you have any questions regarding this matter, please call me at (202) 463-5293.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Scott Randolph", written in a cursive style.

W. Scott Randolph
Director - Regulatory Matters

Attachment

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**GTE NETWORK SERVICES
SERVICE DISRUPTION REPORT**

 INITIAL REPORT X FINAL REPORT

- X (1) 50,000 and Over Customers Affected
- (2) 30,000 - 50,000 Customers Affected
- (3) "Special" Offices/Facilities
- (4) 1,000 and Over Customers Affected - Fire Related

DATE: 03/22/99

TIME: 0835 CDT

GEOGRAPHIC AREA AFFECTED: **Mt. Vernon, WA (LATA 674) Access Tandem affecting the subtending offices of Mt. Vernon, Lynden, Ferndale, and Anacortes, WA.**

ESTIMATED CUSTOMERS AFFECTED: **70,000**

TYPE(S) OF SERVICE AFFECTED: **Toll and Intra-LATA services impacted when fiber was severed ½ mile from Standwood, WA.**

DURATION OF THE INCIDENT: **3 Hours**

ESTIMATED NUMBER OF BLOCKED CALLS: **311,000**

CAUSE OF THE INCIDENT: **Snohomish County Road Maintenance Department requested a locate prior to beginning excavation at the cut location. Records indicate that the locate request was not forwarded to GTE locate personnel. Snohomish personnel once on site realized no locate had been done, and with fiber marker signs in clear view, made the decision to begin digging. Three feet into the ground the crew encountered the marker tape for the fiber cable, however, ignored the tape and continued to dig until the cable was severed. The fiber cable was four feet deep at the point it was severed. Both SS7 links and message traffic from Mt. Vernon to Everett, WA were in this cable when it was severed.**

NAME/TYPE EQUIPMENT AFFECTED: **SS7 links severed in cut fiber cable resulting in isolation in above named geographic location.**

PART OF NETWORK AFFECTED: **SS7 and trunking.**

METHOD(S) USED TO RESTORE: **Service was restored when the fiber optic cable was temporarily spliced with mechanical splices. All fibers were fusion spliced at a later time to provide a more permanent and reliable connection.**

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STEPS TAKEN TO PREVENT RECURRENCE: On April 1, 1999, the SS7 links for Anacortes and Mt. Vernon were diversified. In addition, GTE has implemented a new process to verify daily locate requests between the One Call center and GTE locate employees to identify any potential missed requests. GTE met with Snohomish County officials and One-Call center representatives to discuss the importance of adhering to established procedures and the need to observe fiber warning signs at dig locations.

BEST PRACTICE APPLICATION: The application Best Practice for this outage is contained in Section A - 6.2.1.1 of the SIGNALING NETWORK SYSTEMS COMMITTEE TECHNICAL PAPER and part of the NETWORK RELIABILITY: A Report to the Nation - Compendium of Technical Papers, dated June 1993. This section describes practices to be employed by network service providers to utilize and to maintain "A" link diversity. Two suggestions that might have mitigated the severity of this incident are:

- Line set diversity should be routinely confirmed.
- Whenever maintenance or circuit order activity occurs or a failed link is restored, diversity of the combined link set should be confirmed.

CONTACT NAME: RUDY A. VERDES

TELEPHONE: 972/615-8233

SUBMITTED DATE: 04/19/99

TIME: 1030 CDT